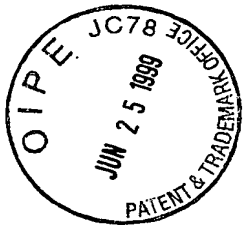


GP 2747

#569.9-99

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



RECEIVED

JUN 29 1999

Group 2700

In re Application of: HUOPANIEMI et al.

SERIAL NO.: 09/273,436

EXAMINER:

FILING DATE: 3/22/99

ART UNIT:

TITLE: METHOD AND SYSTEM FOR PROCESSING DIRECTED

SOUND IN AN ACOUSTIC VIRTUAL ENVIRONMENT

ATTORNEY DOCKET NO.: 297-008575-US(PAR)

The Commissioner of Patents and Trademarks

Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

The following information is being disclosed to the Patent and Trademark Office as information that may be material to the examination of the above-identified patent application.

This Supplemental Information Disclosure Statement is being filed before receipt of a first Office Action on the above-identified patent application. Thus, a certification under 37 CFR 1.97 (e) or fee under 37 CFR 1.17 (p) is not required for the information herein to be considered.

The above-identified patent application claims priority to Finnish Patent Application No. 980649 filed March 23, 1998. Applicants' attorney encloses a copy of a Finnish Official Action issued on the priority Finnish Patent Application No. 980649. The Finnish Official Action cited United Kingdom Patent Application Nos. GB 2 303 019, GB 2 305 092; European Patent

Application No. EP 7 35796; US Patent Nos. 5,502,747; 5,585,587; 5,659,619; 5,581,618; 5,684,881 and PCT International Publication No. WO 98/20706.

Copies of the Finnish Official Action and the cited references are enclosed together with PTO-Form 1449.

Applicant's attorney encloses copies of "Auralization - An Overview", Kleiner et al., 1993, J. Audio Eng. Soc., vol. 41, No. 11, pp. 861-875 and "The Virtual Reality Modeling Language"; VRML 97, April 1997, ISO/IEC JTC/SC24 IS 14772-1, 1997, Information Technology- Computer Graphics and Image Processing, also "Java 3D" API Specification, Sun Microsystems and ISO/IEC JTC/SC29/WG11 CD 14496 "Coding of Moving Pictures and Audio" as well as "Definition of sound source directivity in advanced multimedia systems", Huopaniemi et al., Helsinki University of Technology. All of the above references were provided by the Applicant and may be considered relevant to the invention claimed in the above identified application.

Pursuant to Section 609 and 707.05(b) of the MPEP and 37 CFR 1.97-1.99, the undersigned is bringing the following copending U.S. Patent Applications, of which he is aware, to the attention of the Examiner in the above-identified application as they may be considered pertinent to the invention claimed in the above-identified application.

- (1) U.S. Serial No.: 08/992,499
Filing Date: 12/16/97
Title: METHOD AND ARRANGEMENT FOR RECORDING A
CALL ON A MEMORY MEDIUM
Assignee: Nokia Mobile Phones Ltd.
Attorney Docket No.: 297-007685-US(PAR)

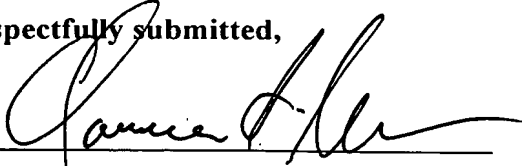
- (2) U.S. Serial No.: 09/223,345
Filing Date: 12/30/98
Title: TELEPHONE SERVICES
Assignee: Nokia Mobile Phones Ltd.
Attorney Docket No.: 442-008405-US(PAR)
- (3) U.S. Serial No.: 08/711,302
Filing Date: 08/30/96
Title: EQUALIZATION OF SPEECH SIGNAL IN MOBILE PHONE
Assignee: Nokia Mobile Phones Limited
Attorney Docket No.: 297-006690-US(PAR)
- (4) U.S. Serial No.: 08/763,975
Filing Date: 12/10/96
Title: METHOD AND DEVICE FOR VOICE ACTIVITY DETECTION AND A COMMUNICATION DEVICE
Assignee: Nokia Mobile Phones Ltd.
Attorney Docket No.: 442-006879-US(PAR)
- (5) U.S. Serial No.: 08/906,371
Filing Date: 08/04/97
Title: AN EARPHONE UNIT AND A TERMINAL DEVICE
Assignee: Nokia Mobile Phones Ltd.
Attorney Docket No.: 442-007368-US(PAR)
- (6) U.S. Serial No.: 09/136,128
Filing Date: 8/18/98
Title: A METHOD AND AN ARRANGEMENT FOR ATTENUATING NOISE IN A SPACE BY GENERATING ANTINOISE
Assignee: Nokia Mobile Phones Ltd.
Attorney Docket No.: 297-008163-US(PAR)
- (7) U.S. Serial No.: 09/184,721
Filing Date: 11/2/98
Title: AUTOMATIC GAIN CONTROL
Assignee: Nokia Mobile Phones Ltd.
Attorney Docket No.: 200-008250-US(PAR)

- (8) U.S. Serial No.: 08/991,763
Filing Date: 12/16/97
Title: ADAPTIVE REMOVAL OF DISTURBANCES IN
TDMA ACOUSTIC PERIPHERAL DEVICES
Assignee: Nokia Mobile Phones Ltd.
Attorney Docket No.: 490-006664-US(PAR)
- (9) U.S. Serial No.: 08/992,500
Filing Date: 12/17/97
Title: A METHOD TO PERFORM DIALING IN A WIRELESS
LOCAL LOOP SYSTEM, A WIRELESS LOCAL LOOP SYSTEM
AND A TERMINAL
Assignee: Nokia Mobile Phones Ltd.
Attorney Docket No.: 297-007672-US(PAR)
- (10) U.S. Serial No.: 09/174,989
Filing Date: 10/19/98
Title: A METHOD AND A SYSTEM FOR PROCESSING A
VIRTUAL ACOUSTIC ENVIRONMENT
Assignee: Nokia OYJ
Attorney Docket No.: 297-008282-US(PAR)

Pursuant to Sections 609 and 707.05(b) of the MPEP and 37 CFR 1.97-1.99, the undersigned is bringing the following U.S. Patents, of which he is aware, to the attention of the Examiner in the above-identified application as they may be considered pertinent to the invention claimed in the above-identified

application. We enclose herewith PTO-Form 1449 which lists all the issued patents cited. Copies of these patents are enclosed with PTO-Form 1449.

Respectfully submitted,



Clarence A. Green, Reg. No. 24,622
Perman & Green, LLP
425 Post Road
Fairfield, CT 06430
203-259-1800

22 June 99
Date

CERTIFICATE OF MAILING

I hereby certify that the attached Information Disclosure Statement, Finnish Official Action, PTO-Form 1449 and references are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D. C. 20231.

6/22/99
Date

Linda Blacketer
Name of Person Making Deposit